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HITT GAINES, PC ALCATEL-LUCENT PO BOX 832570 RICHARDSON, TX 75083			EXAMINER DALENCOURT, YVES	
			ART UNIT 2457	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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# Office Action Summary

**Application No.**

09/653,486

**Applicant(s)**

CROW, JAMES J.

**Examiner**

YVES DALENCOURT

**Art Unit**

2457

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-20, 34-39 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-20, 34-39 and 44-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/C.3)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This office action is responsive to amendment filed on 12/30/2009.

#### ***Response to Amendment***

The Examiner has acknowledged the amended claims 1, 3, 5, 8, 11, 13, 15, 16, 44, and the submission of new claims 46 - 47. The objection of claim 1 and the 35 U.S.C. 112, second paragraph rejection of claims 1, 3, 5, 6, and 11 have been withdrawn.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1 - 5, 7 - 20, 34 - 39, and 44 - 47 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's argument (page 12) that the combination of Wang and Lechleider fails to teach of fairly suggest at least the limitation of "directing a modem coupled to said personal computer to make an attempt to access a network physical layer, to determine basic success or failure of said attempt, and to report to said automation agent data elements determined from said attempt that characterized said network physical layer". The Examiner respectfully disagrees with Applicant's assertion because after a further review of the applied prior art, it is clear that *Wang discloses that a message is sent by the ADSL modem in the CPE 110 to client PC after a service attempt. If call attempt is failed, the call status will return an error code, see table 2, with both VPI/VCI and connection ID be 0s* (col. 21, line 20 through col. 21, line 19). *Wang*

*further discloses that provisioning a user's ADSL service requires that the network 60 and the CPE 110 be provisioned in concert. Also, Lechleider discloses a method for testing a subscriber loop to determine if it can be used as a channel for broadband transmission comprising the steps of establishing a connection between a subscriber modem, or a modem temporarily inserted at the subscriber premises, through the telephone network and a remote modem to a remote computer through a digital line from the network to the remote modem, initiating voice band transmission tests from the subscriber modem to the remote modem, and estimating the broadband transmission performance of the loop based on the voice band transmission tests (col. 3, lines 37 – 47). Lechleider further discloses that modems 103 and 113 are V.34 modems which probe the end-to-end connection between the two modems to determine the analog voice band properties of the path connecting modems 103 and 113. Although modems 103 and 113 are preferably V.34 modems, any modem which as part of its initial negotiation (screeching phase) collects information about the analog properties of the end-to-end connection such as power levels, noise levels, loss levels and far-end echo loss created by the transmission facility will be suitable. Modems use this information to determine the optimum operating conditions, in particular, the maximum data transfer rate when making an end-to-end connection. Modems also store this information in internal registers. The logic device 102 controlling the modem 103 can read the information contained in the modem 103 internal registers. Likewise computer 124 in access server 114 can read the analog information residing in modem 113's internal registers. The information collected by modem 103 and modem 113 determines the*

optimal performance, i.e., maximum data rate, of the customer's loop in the voice band (see col. 4, lines 28 – 66; col. 5, line 14 through col. 6, line 65).

Thus, the combination of Wang and Lechleider does read on the claimed invention.

Regarding Applicant's argument (page 13) that Wang fails to disclose the limitation of "said data elements include a signal strength or an error code related to said access". The Examiner respectfully disagrees with Applicant's argument because *Wang further discloses that a message is sent by the ADSL modem in the CPE 110 to client PC after a service attempt. If call attempt is failed, the call status will return an error code, see table 2, with both VPI/VCI and connection ID be 0s;(see col. 21, line 21 through col. 22, line 19).*

*Applicant also argued that Wang fails to disclose that said determining includes using narrowband modem to contact a DSL qualification server to test a physical line outside the scope of said broadband communication network. The Examiner contends that Wang suggests that the ADSL modem in the CPE 110 may be automatically provisioned as follows. The subscriber orders service from the network service provider 30 by transmitting a request over the communication channel 120 from the CPE 110 to the server 130. Next, the network service provider 30 configures the network 60 for service, such as ADSL ATM service. Once the network 60 is configured, the ADSL modem in the CPE 110 is automatically configured for ADSL service by the server 130 over the communication channel 120. The configuration of the ADSL modem is further described below (see col. 5, lines 37 – 65). **The service provisioning between the***

**modem of the CEP 110 and the modem of the service provider communicate in order to determine whether such customer qualify for an upgrade.**

**Applicant is kindly suggested to review the cited prior art (US 6,643,266), which reads on the claimed invention, especially the argued limitations by the Applicant.**

**In view of such, the rejections are as follow:**

***Claim Objections***

Claim 45 is objected to because of the following informalities: It is suggested to amend claim 45 the same way as claim 44.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 5, 7, 9 - 20 and 34 – 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al (US 6,636,505; hereinafter Wang) in view of Lechleider et al (US 6,091,713; hereinafter Lechleider).

As per claim 1, Wang teaches a method of converting a personal computer for communicating information on a broadband communication network, said personal

computer having a user and a physical location, comprising: offering levels of broadband service to said user (col. 7, lines 33 – 41); making an automation agent available to the user, the automation agent being configured to perform a remote qualifying step to qualify said personal computer for said broadband communication network (col. 6, lines 4 – 12; col. 16, line 64 through col. 17, line 33; Wang discloses : establishing a dialog with an automation server (fig. 6; see CPE Service Selection Application; column 6, lines 25 – 50; col. 7, lines 7 - 32; *Wang discloses that the adoption of ILMI for the service provisioning may enable an automated and “user friendly” service that will provide the advantages of CPE hand free configuration, integrated service management for the operator, enhanced end-to-end service provisioning, and reduced operator service overheads*); directing a modem coupled to said personal computer to make an attempt to access a network physical layer, to determine basic success or failure of said attempt, and to report to said automation agent data elements determined from said attempt that characterize said network physical layer (col. 6, lines 4 – 45; col. 7, line 60 through col. 8, line 40; col. 21, line 20 through col. 21, line 19; *Wang discloses that provisioning a users ADSL service requires that the network 60 and the CPE 110 be provisioned in concert. Resources in the network service provider's 30 core ATM network 80 connect the user's termination on the DSLAMs 90 to particular service providers 60. Regardless of whether these resources are permanently configured or are set up on per session basis, the user's service is configured to associate the resources with the service providers 100 that the user is authorized to access. Wang further discloses that a message is sent by the*

*ADSL modem in the CPE 110 to client PC after a service attempt. If call attempt is failed, the call status will return an error code, see table 2, with both VPI/VC1 and connection ID be 0s.); and performing a workflow process tailored to a selected level of broadband service based on said data elements (col. 6, lines 46 – 65; col. 8, line 36 through col. 9, line 6); and fulfilling said order by initiating said automation agent software on said personal computer to interact with the user and thereby configure said modem for access to said broadband communication network (col. 5, lines 20-67; col. 6, lines 1-65; and col. 7, lines 17 – 52; Wang discloses that the user modem and PC are preferably automatically configured to match the ATM network characteristics set by the network service provider). Claim11 adds the limitation of remotely qualifying said personal computer by determining whether said personal computer meets predetermined acceptance criteria (checking client system for compatibility with broadband network; column 6, lines 66-67; column 7, lines 1-15, lines 33-67; column 8, lines 1- 41, lines 64-67; column 9, lines 1-11).*

Wang discloses substantially all the limitations, but fails to specifically disclose the steps of upgrading the broadband communication network to extend broadband service boundaries into a new geographic area; updating a database to include a plurality of physical locations within the new geographic area; and accessing the database to determine whether said physical location falls within the extended service boundaries for said broadband communication network.

However, Lechleider discloses the steps of upgrading the broadband communication network to extend broadband service boundaries into a new geographic



area (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47); updating a database to include a plurality of physical locations within the new geographic area (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47); and accessing the database to determine whether said physical location falls within the extended service boundaries for said broadband communication network (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47). For sake of argument, Lechleider also discloses the idea of remotely qualifying said personal computer for said broadband communication network, and directing a modem to make an attempt to access a network physical layer to determine basic success or failure of said attempt and to report data elements determined from said attempt that characterized said network physical layer (see col. 3, lines 37 – 57; col. 4, line 28 through col. 5, line 13; and col. 5, line 14 through col. 6, line 65).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Wang by providing the steps of upgrading the broadband communication network to extend broadband service boundaries into a new geographic area; updating a database to include a plurality of physical locations within the new geographic area; and accessing the database to determine whether said physical location falls within the extended service boundaries for said broadband communication network as evidenced by Lechleider for the purpose of determining the viability of deploying ADSL in entire areas by creating lists of subscribers whose subscriber loop can support ADSL, thereby allowing for efficient and ubiquitous deployment of broadband services over the existing subscriber loop plant.

As per claim 2, Wang discloses that said broadband communication network is a DSL network (column 6, lines 4-12).

As per claim 3, Wang and Lechleider disclose the conversion method of claim 2, wherein said network physical layer is a physical line, and said remote .qualifying step further comprises using a narrowband modem to contact a DSL line qualification server to test said physical line outside the scope of said broadband communication network, and wherein said data elements include DSL subscriber loop characteristics associated with said physical line (col. 21, line 20 through col. 21, line 19; *Wang further discloses that provisioning a users ADSL service requires that the network 60 and the CPE 110 be provisioned in concert* and Lechleider: col. 3, lines 37 – 47).

As per claim 4, Wang discloses that said broadband communication network is a cable network (col. 6, lines 4 – 45).

As per claim 5, Wang and Lechleider disclose the conversion method of claim 4, wherein said remote qualifying step further comprises detecting a carrier signal from said broadband communication network, and said data elements include a signal strength of said carrier signal or an error code resulting from said attempt (*see col. 21, line 21 through col. 22, line 19; Wang discloses that a message is sent by the ADSL modem in the CPE 110 to client PC after a service attempt. If call attempt is failed, the call status will return an error code, see table 2, with both VPI/VCI and connection ID be 0s and Lechleider: col. 5, line 43 through col. 6, line 50*).

As per claim 7, Wang and Lechleider disclose that said user is selected for said offer based on pre-established criteria (Wang :column 5, lines 54-65; col. 6, lines 46 – 65 **and Lechleider: col. 5, line 43 through col. 6, line 50; col. 7, lines 24 - 47).**

As per claim 8, Wang and Lechleider disclose the conversion method of claim 7, wherein at least some of said criteria are stored in the database (column 9, lines 36-55 **and Lechleider: col. 5, line 43 through col. 6, line 50; col. 7, lines 24 – 47).**

As per claim 9, Wang discloses that said broadband communication network is an ISDN network (the network includes a fiber optic network; column 6, lines 4-12)

As per claim 10, Wang discloses that said broadband communication network is a wireless network (col. 6, lines 4 - 6).

As per claim 15, Wang and Lechleider disclose that said attempt includes initiating detection of a carrier signal from said broadband communication network (Wang; column 6, lines 13-33 **and Lechleider: col. 5, line 43 through col. 6, line 50; col. 7, lines 24 - 47).**

As per claim 16, Wang and Lechleider disclose wherein said data elements include a signal strength and a set of error codes, and wherein said signal strength and said error codes are used by said automation agent when qualifying said personal computer (Wang column 9, lines 1-11 **and Lechleider: col. 5, line 43 through col. 6, line 50; col. 7, lines 24 - 47).**

As per claim 18, Wang and Lechleider disclose that at least some of said criteria are stored in a subscriber profile database (column 9, lines 36-55 **and Lechleider: col. 5, line 43 through col. 6, line 50; col. 7, lines 24 - 47).**

Claims 11 – 12, 14, 17, 19 – 20, and 46 - 47 incorporate substantially all the limitations of claims 1 – 2, 4, 7, 9, and 10 with minor variations in the claimed language, in system form, rather than method form. The reasons for the rejections of claims 1 – 2 - 7, 9, and 10 apply to claims 11 – 12, 14, 17, and 19 – 20. Therefore, claims 11 – 12, 14, 17, and 19 – 20 are rejected for the same reasons.

As per claims 34 – 37, Wang discloses that an HTML window application may be presented at ATU-R and prompted for "UPLOAD SERVICE PROVISIONING". Once "OK" is pressed, ATU-R invokes TCP/IP or UDP/IP stack to communicate with ATU-C based on a client and server relationship. TCP/IP or UDP/IP packets communicated between ATU-R and ATU-C are using AAL5 which in turn using default VPI and VCI over DMT sub-channels. Either TCP or UDP is applicable for the communication (see figs. 1 – 6; col. 6, lines 25 – 33 and col. 11, lines 7 - 35).

As per claim 38, Wang discloses the conversion method as recited in claim 1, further comprising reporting said data elements to said server and modifying an automation workflow based thereon (col. 5, lines 38 – 48; Wang discloses *that the ADSL modem in the CPE 110 may be automatically provisioned as follows. The subscriber orders service from the network service provider 30 by transmitting a request over the communication channel 120 from the CPE 110 to the server130. Next, the network service provider 30 configures the network 60 for service, such as ADSL ATM service. Once the network 60 is configured, the ADSL modem in the CPE 110 is automatically configured for ADSL service by the server 130 over the communication channel 120).*

As per claim 39, Wang discloses the configuration system of claim 11, wherein said data elements are reported to said server and an automation workflow is modified based thereon (col. 5, lines 38 – 48; Wang discloses *that the ADSL modem in the CPE 110 may be automatically provisioned as follows. The subscriber orders service from the network service provider 30 by transmitting a request over the communication channel 120 from the CPE 110 to the server 130. Next, the network service provider 30 configures the network 60 for service, such as ADSL ATM service. Once the network 60 is configured, the ADSL modem in the CPE 110 is automatically configured for ADSL service by the server 130 over the communication channel 120*).

As per claim 44, Wang discloses the conversion method of claim 1, further comprising extending an offer to form a contract for said broadband service, wherein said automation server is configured to receive from said user via said automation agent an electronic order accepting said offer, said offer and accepting forming a contract for said broadband service, and wherein said remote qualifying is performed in response to said order (see figs. 1 - 6; col. 5, lines 20 - 30; col. 6, lines 25 - 33; col. 11, lines 7 - 35; Wang discloses *that an HTML window application (claimed automation agent software) may be presented at ATU-R and prompted for "UPLOAD SERVICE PROVISIONING". Once "OK" is pressed, ATU-R invokes TCP/IP or UDP/IP stack to communicate with ATU-C based on a client and server relationship. TCP/IP or UDP/IP packets communicated between ATU-R and ATU-C are using AAL5 which in turn using default VPI and VCI over DMT subchannels. Either TCP or UDP is applicable for the communication*).

As per claim 45, Wang discloses the configuration system of claim 11, wherein said automation server is further configured to receive from said user via said automation agent an electronic order accepting an offer of said broadband service extended, said offer and accepting forming a contract for said broadband service, and wherein said remotely qualifying said personal computer is performed in response to said order (see figs. 1 - 6; col. 5, lines 20 - 30; col. 6, lines 25 - 33; col. 11, lines 7 - 35; *Wang discloses that an HTML window application (claimed automation agent software) may be presented at ATU-R and prompted for "UPLOAD SERVICE PROVISIONING". Once "OK" is pressed, ATU-R invokes TCP/IP or UDP/IP stack to communicate with ATU-C based on a client and server relationship. TCP/IP or UDP/IP packets communicated between ATU-R and ATU-C are using AAL5 which in turn using default VPI and VCI over DMT subchannels. Either TCP or UDP is applicable for the communication*).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 11, 46, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Lechleider et al (US 6,091,713; hereinafter Lechleider).

Regarding claims 1, 11, 46, and 47, Lechleider discloses a method of converting a personal computer for communicating information on a broadband communication network, said personal computer having a user and a physical location, comprising: upgrading the broadband communication network to extend broadband service boundaries into a new geographic area (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47); updating a database to include a plurality of physical locations within the new geographic area (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47); accessing the database to determine whether said physical location falls within the extended service boundaries for said broadband communication network (abstract; col. 2, lines 17 – 51; col. 7, lines 24 - 47); and offering levels of broadband service to said user (col. 1, lines 12 – 15; col. 2, lines 29 - 43); making an automation agent available to the user, the automation agent software being configured to perform a remote qualifying step to qualify said personal computer for said broadband communication network (col. 3, lines 37 - 51); said step comprising: establishing a dialog with an automation server (col. 4, lines 28 - 66); directing a modem coupled to said personal computer to make an attempt to access a network physical layer (col. 4, line 28 through col. 5, line 62), to determine

basic success or failure of said attempt, and to report to said automation agent data elements determined from said attempt that characterize said network physical layer (col. 3, lines 48 – 51; col. 7, lines 24 - 47); and performing a workflow process tailored to a selected level of broadband service based on said data elements (col. 7, lines 24 - 47); and fulfilling said order by initiating said automation agent on said personal computer to interact with the user and thereby configure said modem for access to said broadband communication network (col. 3, lines 48 – 51; col. 7, lines 24 - 47).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

John T. Pugaczewski (US 6,643,266) discloses a method for qualifying a loop for DSL service.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YVES DALENCOURT whose telephone number is (571)272-3998. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YVES DALENCOURT/  
Primary Examiner, Art Unit 2457